

REMARKS

Claims 1, 25, 47, 67, 89 and 95 – 99 are pending in this application and claims 4, 5, 27, 28, 49 and 50 were cancelled. Claims 1, 25, 47, 67, and 89 were amended. No new matter has been added. Applicants originally filed the application with two claims designated as claim 64. The second claim designated as claim 64 has been cancelled and added as a new claim designated as claim 100. The specification was amended to provide support for claims 18, 19 - 23, 40, 41-45, 61, 62-65, 82, and 83 – 87. The allowability of claims 95-99 is acknowledged. In view of the foregoing amendments and following remarks, reconsideration of the application is respectfully requested.

Claims 47, 48, 50, 52-54, 58, 60, 67, 68, 70, 72-75, 79, 81, 89 and 90 were rejected under 35 U.S.C. 102(b) as being anticipated by Johnson (4,758,156). Claims 49, 51, 59, 61-65, 69, 71, 80 and 82-87 were rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson (4,758,156). It is the Examiner's opinion that Johnson '156 shows an endodontic post comprising a post section comprising a rigid endodontic section and a tip section. The Examiner notes that the tip section is surrounded by a filler cone 28 and that the tip section comprises at least one protrusion 20A extending outwardly and disposed at various points along the tip section for engaging the filler cone. As to claims 53 and 73, the Examiner notes spherical protrusions 44. As to claims 54 and 75, the Examiner notes that the post section may be made of stainless or plastic (column 2, lines 20-24). As to claims 58, 60, 79 and 81, the Examiner notes that the filler cone may comprise gutta percha (column 4, lines 33-34). For the reasons set forth below, the rejections are respectfully traversed.

Claim 47 is directed to an endodontic post comprising a post section, the post section comprising a rigid endodontic section and a tip section; wherein the tip section is surrounded by a filler cone; wherein the tip section does not extend the length of the filler cone; and wherein the tip section comprises one or more protrusions extending outwardly from the tip section for engaging the filler cone. Claim 67 is directed to a device for filling a root canal comprising a carrier; and a filler cone; wherein the filler cone is disposed on the carrier; wherein the carrier comprises a rigid handle section and a tip section; wherein the tip section is surrounded by the filler cone; wherein the tip section does not extend the length of the filler cone; and wherein the tip section comprises one or

more protrusions extending outwardly from the tip section for engaging the filler cone. Claim 89 is directed to a method for restoring the root canal of a tooth comprising preparing the root canal; providing a post for insertion into the canal, whereby the post comprises a post section, wherein the post section comprises a rigid endodontic section and a tip section, wherein the tip section is surrounded by a filler cone, wherein the tip section does not extend the length of the filler cone; and wherein the tip section comprises one or more protrusions extending outwardly from the tip section for engaging the filler cone; and inserting the post into the canal, whereby the root canal is filled by the filler cone. All the claims are directed to an obturation device having a tip section that is surrounded by the filler cone and wherein the tip section does not extend the length of the filler cone. This provides flexibility and ease of placement of the filler cone into the root. The filler cone easily bends to the contour of the root.

Johnson '156 is directed to a tool for applying filler material to an endodontically prepared root canal. The tool in Johnson '156 includes a shaft 12 having filling material 28 formed thereon. Shaft 12 extends the entire length of filling material 28. This is unlike the claimed invention which requires that the tip section not extend the length of the filler cone. The claims are not anticipated by Johnson '156.

Claims 1-11, 15-46, 89-94 and 46 were rejected under 35 U.S.C. 103(a) as being unpatentable over Manocha (5,595,486) in view of Kert (6,010,335) and Johnson '156. Claims 66 and 88 were rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson '156 in view of Kert '335. Claims 89-93 were rejected under 35 U.S.C. 103(a) as being unpatentable over Manocha '486 in view of and Johnson '156. It is the Examiner's opinion that Manocha '486 shows an endodontic post comprising a post section comprising a rigid endodontic section 20 and a tip section 10 wherein the tip section is surrounded by a filler cone 50. The Examiner notes that Manocha '486 does not disclose that the tip section is flexible or that it has at least one protrusion extending outwardly therefrom for engaging the filler cone. The Examiner cites Kert '335 to show an endodontic post where the tip section is flexible. The Examiner concludes that it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the tip section of Manocha '486 flexible, as taught by Kert '335 so that the tip section can adapt to the curvature of the root. The Examiner cited Johnson '156 to

show an endodontic post comprising a post section comprising a rigid endodontic section and a tip section wherein the tip section is surrounded by a filler cone 28 and wherein the tip section comprises at least one protrusion 20A extending outwardly and disposed at various points along the tip section for engaging the filler cone. The Examiner concludes that it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the tip section of Manocha '486 with at least one protrusion, in view of Johnson '156, in order to provide adhesion surfaces for the filler cone. As to claims 4 and 27, the Examiner cites Manocha '486 to show the claimed invention except for the carrier extending the full length of the filler cone. The Examiner concludes that it would have been an obvious matter of design choice to form the carrier so that it extends the full length of the filler cone, since such a modification would have involved a mere change in the size of a component. As to claims 6 and 29, the Examiner notes that Johnson '156 does not disclose a single protrusion, but concludes that it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide only a single protrusion, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. As to claims 9 and 32, the Examiner notes that the tip section of Manocha '486 is narrower in diameter than the diameter of the endodontic portion. As to claim 10, the Examiner notes the supracoronal portion 22 of Manocha '486. As to claims 11 and 33, the Examiner notes that the post of Manocha '486 may be made of stainless steel, plastic, titanium or other biocompatible material (column 2, lines 62-64). As to claims 15, 17, 37 and 39, the Examiner notes that the filler cone of Manocha '486 may comprise gutta percha (column 2, lines 4-5). As to claims 24 and 46, the Examiner notes that the filler cone of Kert '335 may include an anti-microbial agent to prevent the risk of inflammation and infection. The Examiner concludes that it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the filler cone material of Manocha '486 with an antibiotic, in view of Kert '335, in order to prevent the risk of inflammation and infection. As to claims 16, 18-23, 38, 40-45, the Examiner concludes that without a showing of criticality, the specific material used for the filler cone is considered to have been an obvious design choice, to one of ordinary skill in the art. For the reasons set forth below, the rejection is respectfully traversed.

The claimed invention is directed to an endodontic post comprising a post section, the post section comprising a rigid endodontic section and a tip section; wherein the tip section is a flexible carrier surrounded by a filler cone; wherein the tip section does not extend the length of the filler cone; and wherein the tip section comprises one or more protrusions extending outwardly from the tip section for engaging the filler cone.

Manocha '486 teaches a post having a carrier 10 surrounded by filler material 50. Carrier 10 extends the length of filler material 50. This is unlike the claimed invention, which requires that the tip section not extend the length of the filler cone. Kert '335 and Johnson '156 do not cure the deficiencies of Manocha '486. Kert '335 is directed to an endodontic device having a shaft 14 that extends the length of filling material 16. As discussed above, Johnson '156 is also directed to a tool for applying filler material to an endodontically prepared root canal, wherein the shaft 12 extends the entire length of filling material 28. None of the references render obvious the claimed invention.

Claims 12-14, 34-36 were rejected under 35 U.S.C. 103(a) as being unpatentable over Manocha '486 in view of Kert '335 and Johnson '156 as applied to claim 11 above, and further in view of Goldberg (4,894,012). Claims 55-57, 76-78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson (4,758,156) in view of Goldberg (4,894,012). The Examiner cites Goldberg '012 to show fiber or filler reinforced materials. For the reasons set forth below, the rejection is respectfully traversed.

As stated above, Manocha '486, Kert '335 and Johnson '156 do not anticipate or render obvious the claimed invention. Goldberg '012 does not cure the deficiencies of Manocha '486, Kert '335 and Johnson '156. Goldberg '012 is directed to passive dental appliances of fiber-reinforced composites. There is no showing in Goldberg '012 to provide support for the limitation in the claimed invention regarding the requirement that the tip section not extend the length of the filler cone. The claims are not rendered obvious by the combination of references.

In summary, none of the cited references teach an obturation device having a tip section that is surrounded by the filler cone and wherein the tip section does not extend the length of the filler cone. This provides flexibility and ease of placement of the filler cone into the root. The filler cone easily bends to the contour of the root. The cited

references do not show or suggest applicants' claimed invention and notice to this effect is respectfully requested.

Accordingly, it is believed that claims 1, 25, 47, 67, 89 and 95 – 99 specify patentable subject matter and are now in condition for allowance. Applicants therefore respectfully request favorable reconsideration and allowance of this application. The Examiner is requested to telephone applicants' attorney at the number listed below if it will advance the prosecution of this case. If necessary, the Examiner is authorized to charge further fees necessary to advance the prosecution in this case from Deposit Account No. 500718.

Respectfully submitted,



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